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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,637	07/17/2002	Yanyan Wu	1076.41515 X00	7411

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ANTONELLI, TERRY, STOUT & KRAUS, LLP  
1300 NORTH SEVENTEENTH STREET  
SUITE 1800  
ARLINGTON, VA 22209-3873

EXAMINER
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VO, DON NGUYEN

ART UNIT	PAPER NUMBER
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2611

NOTIFICATION DATE	DELIVERY MODE
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06/18/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

officeaction@antonelli.com  
dprater@antonelli.com  
tsampson@antonelli.com

## Office Action Summary

Application No.

10/088,637

Applicant(s)

WU, YANYAN

Examiner

DON N. VO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 35-120 is/are pending in the application.
- 4a) Of the above claim(s) 120 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35,42-45,52-58,65-71,78-87,92-105,108-113,118 and 119 is/are rejected.
- 7) ☒ Claim(s) 36-41,46-51,59-64,72-77,88-91,106,107 and 114-117 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group I, claims 35-119 in the reply filed on 3/12/2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Accordingly, claim 120 is not further treated on the merit.

### ***Specification***

2. The disclosure is objected to because of the following informalities:

The fonts of the mathematical presentations as disclosed on page 4-6, 12-14, 16, 17, 21 and 22 are too small and not clearly readable. Applicant is respectfully requested to correct these and any other exists in the disclosure to avoid the problem of printing if the application is to be published at the time of allowance.

Appropriate correction is required.

### ***Drawings***

3. The drawings are objected to because there are no descriptive text labels for:

- a. element (30) of figure 1;
- b. all elements of figures 2, 3, 6 and 8;
- c. elements (51) – (53) of figure 7; and

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d. element (68) of figure 9.

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

5. Claim 119 is objected to because of the typographical error "ise" recited at line 23. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 42, 43, 52, 53, 65, 66, 78-83, and 92-100 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of "said spreading sequence" recited in claim 42, line 1 lacks antecedent basis. Similar problem exists for the same recitation recited in claims 52, 65 and 78.

The dependency of claim 65 appears to in error since claim 55, which claim 65 is depending from, is claiming a transmitter, not a mobile phone. The dependency of claim 65 is suggested to change to 58.

The recitation of claims 92-10 is vague and indefinite because of their hybrid form, i.e. the combination of the elements and steps makes claims unclear.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 35, 44, 45, 54-57, 67-71, 84-87, 92-95, 100-104, 108-113, 118 and 119 are rejected under 35 U.S.C. 102(e) as being anticipated by Ichihara (US 6,553,018).

Regarding claims 35, 44, 45, 54-57, 67-71, 100, 108, 109, 118 and 119, Ichihara, as shown in figure 9, teaches and method and apparatus for transmitting signals comprising providing digital data (104A, 104B), phase modulating bitstreams using spreading signals (115A, 115B), phase modulating a carrier with modulating signals (117A, 117B, 119) and summing the modulated carrier instances (120). See also column 5, lines 24-67.

Regarding claims 84-87, 92-95, 101-104, 110-113, and 119, Ichihara further teaches the base station (102) receiving the modulated signal from the mobile terminal (121) and although not shown, the reverse order of the transmitter process, i.e. baseband processing, extracting the plurality modulating signals, etc... is anticipated to be performed in the base station (102).

#### ***Allowable Subject Matter***

10. Claims 36-41, 46-51, 59-64, 72-77, 88-91, 106-107 and 114-117 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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11. Claims 42, 43, 52, 53, 65, 66, 78-83 and 96-99 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References De Gaudenzi et al (US 5,327,455), Xin et al (US 6,181,674) and Bang et al (US 2002/0097779) are cited because they are pertinent to the method and apparatus for transmitting and receiving signals.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DON N. VO whose telephone number is (571) 272-3018. The examiner can normally be reached on Mon-Fri (9:00AM - 6:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAY PATEL can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



DON N. VO  
Primary Examiner  
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